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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,473	03/23/2004	Igor A. Krichtafovitch	WO-432.005 CON	1707

7590 05/02/2006  
Fulbright & Jaworski L.L.P.  
801 Pennsylvania Avenue, N.W.  
Washington, DC 20004-2623

EXAMINER
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TRAN, CHUC

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/806,473

Applicant(s)

KRICHTAFOVITCH ET AL.

Examiner

Chuc D. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-46 is/are allowed.
- 6) ☒ Claim(s) 17-19 is/are rejected.
- 7) ☒ Claim(s) 20-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/01/06, 12/01/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakakibara (USP. 4,643,745).

Regarding claim 17, Sakakibara et al disclose an electrostatic fluid accelerator in Fig. 2, comprising:

- a first array of corona discharge electrodes (10) disposed in a first plane (Fig. 2);
- a second array of corona discharge electrodes (30) disposed in a second plane (Fig. 2), the second plane being parallel to and spaced from the first plane (Fig. 2);
- a third array of accelerating electrodes (200) disposed in a third plane (Fig. 2), the third plane being parallel to the first and second planes and disposed there between (Fig. 2), wherein each accelerating electrode of the third array (20) is disposed in a staggered configuration with respect to the corona discharge electrodes of the first array (10) (Fig. 2).

Regarding claim 18, Sakakibara et al disclose that each accelerating electrode of the third array (20) is disposed in a staggered configuration with respect to the corona discharge electrodes of the second array (30) (Fig. 2).

Regarding claim 19, Sakakibara et al disclose that the corona discharge electrodes of the

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first array (10) are disposed in an aligned orientation with respect to the corona discharge electrodes of the second array (30) (Fig. 2).

***Allowable Subject Matter***

3. Claims 27-46 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to disclose or suggest a first array of accelerating electrodes disposed in a second plane; and a second electrostatic accelerator stage having a second array of corona discharge electrodes disposed in a third plane and a second array of accelerating electrodes disposed in a forth plane in independent claim 27.

Claims 28-39 are allowed for the reasons given above because of their dependency status from independent claim 27.

Prior art fails to disclose or suggest the method for determining an inter stage spacing being within the range of 1.2 to 2.0 times the intra stage spacing; and wherein the spacing between the first and second planes is less than the inter stage spacing in independent claim 40.

Claims 41-46 are allowed for the reasons given above because of their dependency status from independent claim 40.

5. Claims 20-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Citation of relevant prior art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Prior art Sakakibara et al (USP. 4,643,745) disclose air cleaner using ionic wind.

Prior art Yu (USP. 5,037,456) disclose electrostaticprecipetator.

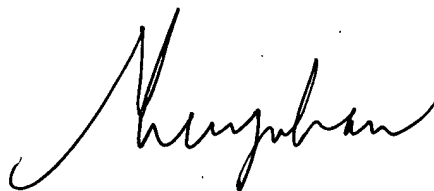
***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system; contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC  
April 21, 2006



**THUY V. TRAN  
PRIMARY EXAMINER**